

AMENDMENTS TO THE CLAIMS:

Please amend claims 1-14 as follows:

1. (Currently Amended) A DNA molecular size marker comprising that contains DNA fragments of which are 441, 325, 231, 210, 131, 116, 94 and 79 base pairs long (Figure 1-Marker B).

2. (Currently Amended) The A method for the production of the molecular size marker in claim 1 is done by isolation of claim 1, the method comprising:

- a) isolation of DNA from mycobacteriae,
- b) amplification of hsp65 gene by PCR,
- c) purification of DNA amplification products,
- d) molecular cloning into a plasmid vector,
- e) plasmid isolation of the plasmid vector, and
- f) restriction enzyme digestion.

3. (Currently Amended) The method of claim 2, wherein the species of mycobacteriae used for the isolation of DNA produce DNA fragments of 441, 325, 231, 210, 131, 116, 94 and 79 base pairs isolation-referred in claim 2 for production of the molecular size marker in claim 1, are the ones which produce the required size fragments indicated in claim 1.

4. (Currently Amended) The method of claim 3, wherein the species of mycobacteriae is selected from the group consisting of referred in claim 3 which are used for production of molecular weight marker referred in claim 1 are *M. simiae*, *M. smegmatis*, *M. gallinarum*, *M. intracellulare*, and *M. terrae*.

5. (Currently Amended) The method of claim 2, wherein primers used in amplification of hsp65 gene referred in claim 2 are TB11 (5' ACC AAC GAT GGT GTG TCC AT 3'), and TB12 (5' CTT GTC GAA CCG CAT ACC CT 3') are used in the amplification of hsp65 gene.

12. (Currently Amended) The method of claim 9, wherein primers ~~used in amplification of hsp65 gene referred in claim 9~~ are TB11 (5' ACC AAC GAT GGT GTG TCC AT 3'), and TB12 (5' CTT GTC GAA CCG CAT ACC CT 3') are used in the amplification of hsp65 gene.

13. (Currently Amended) The method of claim 9, wherein the restriction enzyme ~~indicated in claim 9~~ is HaeIII.

14. (Currently Amended) ~~Molecular size marker indicated in claim 8 is used in A~~ method for determining the size of restriction fragments obtained by HaeIII digestion during digestion, in the step of electrophoretic analysis of hsp65 by PCR-REA, the method comprising the molecular size marker of claim 8 (Polymerase Chain Reaction—Restriction Enzyme Analysis) method.

6. (Currently Amended) The method of claim 2, wherein the restriction enzyme indicated in claim 2 is BstEII.

7. (Currently Amended) Molecular size marker indicated in claim 1 is used in A method for determining the size of restriction fragments obtained by BstEII digestion during digestion, in the step of electrophoretic analysis of hsp65 by PCR-REA, the method comprising the molecular size marker of claim 1 (Polymerase Chain Reaction—Restriction Enzyme Analysis) method.

8. (Currently Amended) A DNA molecular size marker comprising that contains DNA fragments of which are 185, 161, 152, 139, 127, 103, 87, 69, 59, 58, 42, 40, 36 and 34 base pairs long (Figure 2-Marker H).

9. (Currently Amended) The A method for the production of the molecular size marker in claim 8 is done by isolation of claim 8, the method comprising:

- a) isolation of DNA from mycobacteriae,
- b) amplification of hsp65 gene by PCR,
- c) purification of DNA amplification products,
- d) molecular cloning into a plasmid vector,
- e) plasmid isolation of the plasmid vector, and
- f) restriction enzyme digestion.

10. (Currently Amended) The method of claim 9, wherein the species of mycobacteriae used for the isolation of DNA produce DNA fragments of 185, 161, 152, 139, 127, 103, 87, 69, 59, 58, 42, 40, 36 and 34 base pairs isolation referred in claim 9 for production of the molecular size marker in claim 8, are the ones which produce the required size fragments indicated in claim 8.

11. (Currently Amended) The method of claim 10, wherein the species of mycobacteriae is selected from the group consisting of referred in claim 10 which are used for production of molecular weight marker referred in claim 1 are *M. tuberculosis*, *M. simiae*, *M. gallinarum*, *M. chitae*, and *M. xenopi*.